

REMARKS

Claims 1 and 3-21 remain pending. Claims 1, 3, 5, and 12-22 are currently amended, and claim 2 is canceled.

Claims 1-3, 5, 11-15, and 22 stand rejected under 35 U.S.C. § 103(a) as obvious over Ahonen (U.S. Patent No. 5,216,330) in view of Savas (U.S. Patent No. 5,983,828). However, applicants' invention is distinguishable from both Ahonen and Savas.

For example, applicants disclose a beam source wherein an accelerating voltage of 1 kV or less is applied between the mesh electrode and the beam emitting electrode. A relatively low energy beam is suitable for micro-fabricating processes, such as deposition and etching. In an embodiment of the invention, the two downstream electrodes are separated by a distance of 5 millimeters or greater. (Note applicants' disclosure, page 12, line 28, through page 13, line 14.) Neither Ahonen nor Savas disclose these features.

As shown above, claim 1 is amended to emphasize the features discussed in the preceding paragraph. Accordingly, applicants now request the withdrawal of the rejection of claim 1 based on Ahonen and Savas. Because claims 3, 5, and 11 depend from claim 1, applicants request the withdrawal of the rejection of those claims also for at least the reason of their dependency.

Regarding the remaining claims, note that applicants' invention can be embodied as a neutral particle beam source. Applicants disclose an embodiment in which charge exchange takes place in beam emitting holes formed in the downstream electrode, resulting in an emission of a neutral particle beam. (See, for example, page 2, lines 16-24, and page 5, line 4.) As shown above, applicants amend claim 12 to emphasize this feature. This feature is not disclosed by either Ahonen or Savas. Accordingly, withdrawal of the obviousness rejection of claim 12 based

on these references is now requested. Also, because claims 13-15 and 22 depend from claim 12, withdrawal of the obviousness rejection of those claims is requested for at least the reason of their dependency.

Claims 4-7, 10, 16-18, and 21 stand rejected under 35 U.S.C. § 103(a) as obvious over Ahonen in view of Savas, and further in view of Kinoshita et al. (U.S. Patent No. 5,518,572). Applicants respond by noting that each of claims 4-7, 10, 16-18, and 21 depend from one of claims 1 or 12, and, as discussed above, claim 1 and 12 should be allowed. Accordingly, claims 4-7, 10, 16-18, and 21 should also be allowed by virtue of their dependency.

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as obvious over Ahonen in view of Savas, further in view of Kinoshita et al., and still further in view of Sheehan et al. (U.S. Patent Publication No. 2002/0011560). As explained above, the rejection of independent claims 1 and 12 based on Ahonen and Savas should be withdrawn. Applicants acknowledge that the present rejection is also based on Kinoshita et al. and Sheehan et al. However, neither Kinoshita et al. nor Sheehan et al. is relied upon to teach or suggest subject matter recited in base claims 1 or 12. Accordingly, the present rejection of claims 1 and 12 should be withdrawn. Because each of claims 2-11 and 13-22 depend from one of claims 1 or 12, the rejection of claims 2-11 and 13-22 also should be withdrawn by virtue of their dependency.

As a final matter, applicants amend the claims to replace “voltage-applying means” with “voltage-applying device.” Support for the amendment can be found in applicants’ disclosure, for example, on page 9 in lines 21-26.

In view of the remarks above, applicants now submit that the application is in condition for allowance. Accordingly, a Notice of Allowability is hereby requested. If for any reason it is believed that this application is not now in condition for allowance, the Examiner is welcome to

contact applicants' undersigned attorney at the telephone number indicated below to arrange for disposition of this case.

In the event that this paper is not timely filed, applicants petition for an appropriate extension of time. The fees for such an extension, or any other fees which may be due, may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

A handwritten signature in black ink, appearing to read "Joseph L. Felber", with a stylized flourish at the end.

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